



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

Northern Gauge, Inc.

#400-280 Portage Close

Sherwood Park, Alberta, Canada T8H 2R6

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L2350

Certificate Number


ANAB Approval

Certificate Valid Through: 03/25/2021
Version No. 004 Issued: 02/27/2020



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Northern Gauge, Inc.
 #400 – 280 Portage Close
 Sherwood Park, Alberta, Canada T8H 2R6
 Peter Laurensse
 780-628-0844

CALIBRATION

Valid to: **March 25, 2021**

Certificate Number: **L2350**

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Gauge Blocks: Central Length	(0.05 to 4) in	(5.7 + 5.9L) μin	ISO 3650 using gauge block comparator and Master gauge blocks
Plain Plug Gauges	(0.1 to 7) in (0.20 to 7) in	(46 + 2.4D) μin (41 + 3.8D) μin	ANSI/ASME B89.1.5: Trimos Horizon Premium Micura CMM
Plain Ring Gauges	(0.25 to 7) in (0.20 to 7) in	(74 + 5.5D) μin (41 + 3.8D) μin	ANSI/ASME B89.1.6: Trimos Horizon Premium Micura CMM
Thread Plug Gauges: (4-80 TPI) Pitch Diameter Major Diameter	Diameter: (0.1 to 7) in	(82 + 2D) μin (46 + 2.4D) μin	ANSI/ASME B1.1-B1.2, ANSI/ASME B1.5-B1.8 Trimos Horizon Premium
Thread Ring Gauges: (4-80 TPI) Pitch Diameter Major Diameter	Diameter: (0.25 to 7) in	(74 + 10D) μin (74 + 5.5D) μin	ANSI/ASME B1.1-B1.2, ANSI/ASME B1.5-B1.8 Trimos Horizon Premium
Rod Length Standards	(0.1 to 20) in	(50 + 3.5L) μin	Trimos Horizon Premium



Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Calipers - OD, ID and depth	(0.5 to 48) in	(580 + 18L) μin	Master gauge blocks
	(0.5 to 25.5) in	(620 + 23L) μin	Caliper Checker
Micrometers	(0.05 to 59) in	(59 + 22L) μin	Master gauge blocks
Dial/Digital Indicators	(0 to 3) in	38 μin	Master gauge blocks
	(0 to 3) in	55 μin	Trimos Horizon Premium
Height Gauges	(0 to 24) in	(150 + 3.2L) μin	Master gauge blocks
Lead Gauge / Ring Groove Setting Standards	(0 to 18) in	(47 + 4.6L) μin	API 5B & API 6A using CMM Micura
Universal Length Measuring Machines (ULM's) ¹	(0 to 20) in	(10 + 2.2L) μin	Renishaw XL-80 Laser Interferometer
Tape Measures & Ruler	Up to 300 in	(540 + 3.1L) + 11N μin	JIS B 7512 using Octagon Tape and Scale Measuring Machine N = number of resets of the 6 inch reference standard
Surface Plates ¹ : Flatness Overall Flatness on any Local Area	Length/Width/Diameter: Up to 48 in Any (250 mm x 250 mm)	90 μin 0.99 μm	ISO 8512-2 using: Electronic Level System



Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pneumatic Pressure Gages	(0 to 5 000) psig (5 000 to 10 000) psig (10 000 to 30 000) psig	26 psig 12 psig 140 psig	API/ISO 14313 at 10.2.3 using Digital Pressure Gauges
Torque Wrenches	(20 to 100) lbf·in	2.3 % of reading	ISO 6789:2003 using Torque Transducers and Readout, or Torque Analyzer
	(20 to 100) lbf·ft	3 % of reading	
	(100 to 200) lbf·ft	3.4 % of reading	
	(200 to 1 000) lbf·ft	3 % of reading	

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. L = length in inches, D = Diameter in inches.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L2350.



Vice President

